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The actualization of educational improvements in school systems necessitates an innovative climate. A schematic diagram shows seven functions as constituting the planning and inventing process for educational improvement. Of these seven functions, four are developmental and adaptation processes, and three provide for the routinization of building changes into a system. Management of educational improvements in a school system requires organization of these diverse processes. Three suggestions for promoting an innovative climate are as follows: (1) Coordination, the steering and development of innovative processes, is necessary. (2) Structures to manage innovative processes can be created and existing ones utilized (seven types of structures are described). (3) Climate, a diffuse concept in educational literature, can be replaced by the well-defined, social-psychological concept of group norm, which specifies organizational conditions promoting innovativeness. The necessary elements of a norm are a group, interaction time among the group, specific ideas of desirable or undesirable behavior, and sanction. Empirical data on innovativeness norms and nine different strategies for changing norms are presented. (MLF)

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# THE DEVELOPMENT OF INNOVATIVE CLIMATES IN EDUCATIONAL ORGANIZATIONS

*By*

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# THE DEVELOPMENT OF INNOVATIVE CLIMATES IN EDUCATIONAL ORGANIZATIONS*

Matthew B. Miles[1]

Many educational administrators, including some of the highly innovative ones who have preceded me on this program, tend to treat the climates of their communities and school systems as a given. It is suggested that an innovative superintendent faced with an intractably conservative community should simply leave for a more beneficent surround. Or, the elimination of the institution called the school board is "facetiously" proposed. These and other "go/no-go" solutions to the problems of change in education give little weight to the idea that innovative climates are a developable property of school systems. This paper reviews some of the avenues to change in such climates.

I think the essential problem facing us can be illuminated by a bit of fantasy. Suppose you were reading the morning newspaper a few days ago and you saw a story about a Conference of Innovative Doctors. How would you feel? Or suppose it said a Conference of Innovative Engineers? How would you feel?

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Such titles sound more than a little ridiculous. Doctors are routinely expected to be innovative, to keep up to date on new practices, and to use them as a matter of course. The engineer's stock in trade is the design of new solutions to problems. But the very title of this conference suggests in some way that educators are not innovative. The people in this room represent less than a one percent sample from the country's school districts; it is as if a special, elite organization is somehow required to provide support and sustenance for changers. Is it that innovation is not seen as integral to, part and parcel of, daily life in schools?

There are, of course, many supposed barriers to innovation in schools. The lack of financial resources is often cited, for example. Yet Carlson's work on educational innovation (1965a) showed that in the state of West Virginia and in Allegheny County, Pennsylvania, dollar expenditures correlated only about .3 with adoption rates for six major educational innovations.[2]

It has also been suggested that the school system is essentially a tame, domesticated organization (Carlson, 1965b), is the prisoner of the local community, and cannot innovate. It has also been noted that the school is not a competitive organization. If it does a poor job, its customers don't go elsewhere, and there is thus no impetus for change.

Others have suggested that there are no good utility and outcome measures for education, though I must say that the AASA's reaction to the Carnegie National Assessment project leads me to believe that there may be more outcome measures around than some people would like.

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[2] Carlson (1965a) also found that though West Virginia districts spent only 62% as much as districts in Allegheny County, some innovations such as language labs, programmed instruction and team teaching had diffused faster in West Virginia.

It has also been suggested that the cycle time is too long--that one can't really tell how good an innovation is for 20 years, until the child grows up. Many such explanations for slow innovation rates in education have been advanced.[3]

However, I believe most such efforts (where they are not self-serving justifications) do not explain much; they are not close enough to the structures and processes of day-to-day life in school systems.

There have, of course, been many historical efforts to create new structures and processes aimed at inducing educational systems to alter themselves more rapidly and effectively. The laboratory school was one such effort; the creation of the instructional supervisor role was another. More recently, we have seen the development of external structures, such as national curriculum reform groups, R&D centers, regional laboratories, and special-purpose groups like Educational Facilities Laboratories.

It may be useful to look more closely at some of the processes involved in educational improvement--the processes which structures like these were presumably built to carry out and support. Figure 1 shows them in schematic form.

## Educational Improvement

Educational improvement (that is, innovation which ends up with "better," "more effective," "good" results) is not, essentially, a unitary phenomenon. Many interlinked, overlapping, counteracting processes are involved.

For example, processes 1 through 7 can be seen fundamentally as a cluster of planning and inventing processes. Item 1 indicates the importance of knowing what you want to accomplish; item 2 involves making

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[3] See for further discussion of these and others, Miles (1964, 1967).

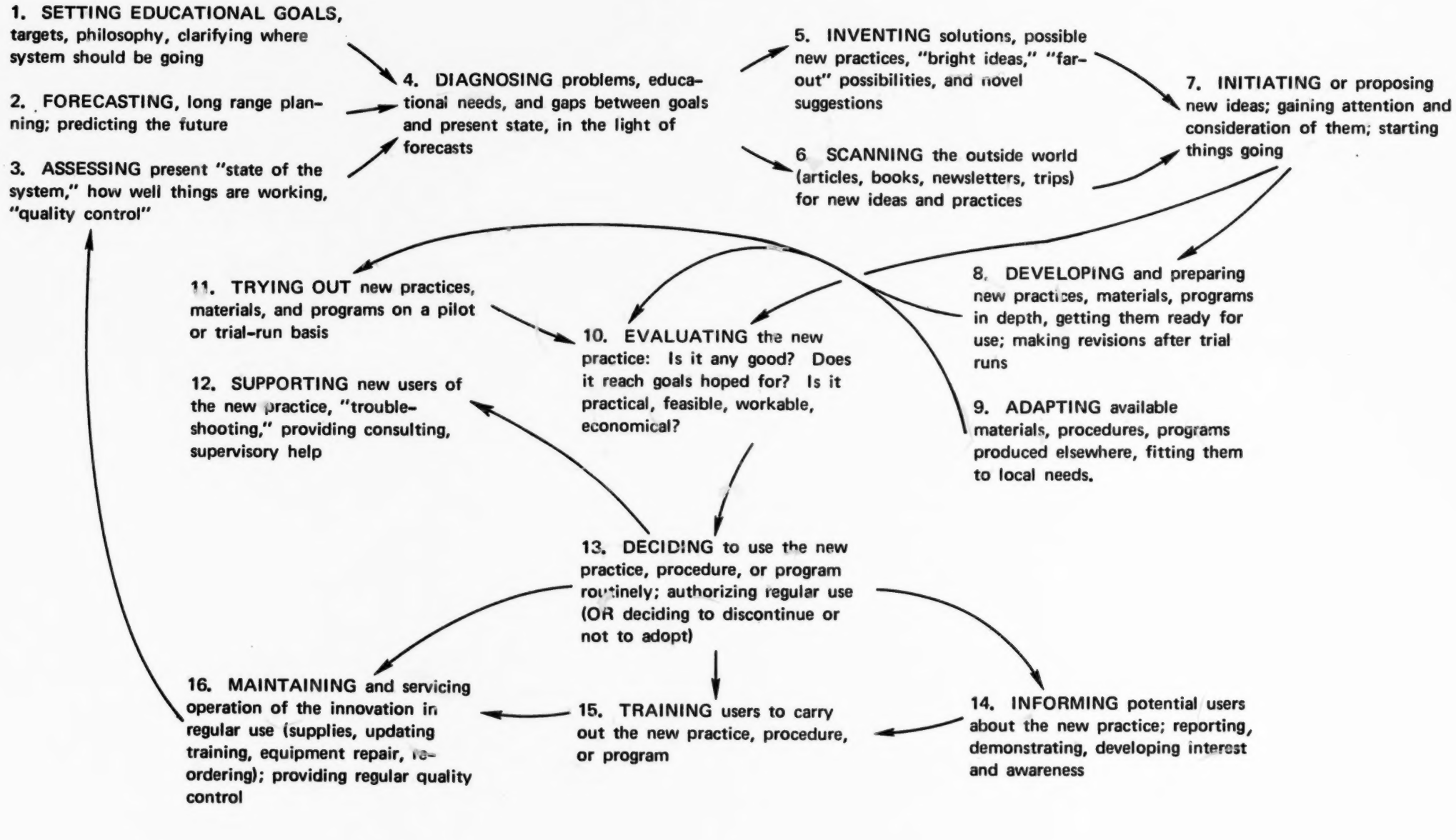
1. SETTING EDUCATIONAL GOALS, targets, philosophy, clarifying where system should be going
2. FORECASTING, long range planning; predicting the future
3. ASSESSING present "state of the system," how well things are working, "quality control"
4. DIAGNOSING problems, educational needs, and gaps between goals and present state, in the light of forecasts
5. INVENTING solutions, possible new practices, "bright ideas," "far-out" possibilities, and novel suggestions
6. SCANNING the outside world (articles, books, newsletters, trips) for new ideas and practices
7. INITIATING or proposing new ideas; gaining attention and consideration of them; starting things going
8. DEVELOPING and preparing new practices, materials, programs in depth, getting them ready for use; making revisions after trial runs
9. ADAPTING available materials, procedures, programs produced elsewhere, fitting them to local needs.
10. EVALUATING the new practice: Is it any good? Does it reach goals hoped for? Is it practical, feasible, workable, economical?
11. TRYING OUT new practices, materials, and programs on a pilot or trial-run basis
12. SUPPORTING new users of the new practice, "trouble-shooting," providing consulting, supervisory help
13. DECIDING to use the new practice, procedure, or program routinely; authorizing regular use (OR deciding to discontinue or not to adopt)
14. INFORMING potential users about the new practice; reporting, demonstrating, developing interest and awareness
15. TRAINING users to carry out the new practice, procedure, or program
16. MAINTAINING and servicing operation of the innovation in regular use (supplies, updating training, equipment repair, re-ordering); providing regular quality control

FIGURE 1 SOME PROCESSES INVOLVED IN EDUCATIONAL IMPROVEMENT

projections as to probable futures; item 3 requires taking the pulse of the local system--assessed against some idea of what is "normal" for the system, as well as the more purpose-laden statements generated in item 1.

Such planning behaviors lead, in item 4, to some kind of diagnosis, assessment of problems, and exposure of gaps between hopes and actuality, including, usually, some causative hypotheses to answer the question, "why are we not where we'd like to be?"

Items 5 and 6 involve locating solutions to problems. These may be invented out of whole cloth; more typically, a good deal of scanning goes on, aided by attendance at conferences like this one, and by scanning aids like ERIC and the Educational Products Information Exchange.

Item 7 dramatizes the fact that solutions to educational problems don't move into a system unaided. Solutions seem to need pushers, initiators, what Schon (1963) has called the "product champion."

These seven functions, then, can be seen as constituting the planing and inventing segment of educational improvement operations. In passing, they do seem to require a certain type of supporting climate if they are to occur. Hainer, Kingsbury and Gleicher (1967) have discussed this in their analysis of industrial research and development groups. They believe that good R&D groups are characterized by features like these: openness toward challenging "what we all know to be true"; willingness to play with the problem, look at it from unusual perspectives; willingness to deal openly with conflict, hostility, anger, affection, and closeness, while working on the problem at hand; tolerance for unusual behavior, letting each person develop his own style of contribution; skill in imagery, metaphor ("What would it feel like if all pupils couldn't come to school at all for three weeks, and what would happen to us?"); and (not least) willingness to speak before you have anything to say--that is, to give an unconsidered, far-out, crazy opinion. The reader might think a

minute about how well-equipped his immediate staff or the staff of his building faculty is to create this kind of climate. Can spontaneous, metaphorical ways of inventing things surface in the group, or is it all sober and played close to the vest?

Items 8 through 12 in Figure 1 are essentially developmental and adaptation processes. Someone's bright idea is never "enough" as it stands. Preliminary engineering design is required, if the idea is brand new (item 8); even with well-developed materials, a good deal of adaptation (item 9) usually takes place.[4]

Item 10 involves evaluation. Notice, in Figure 1, that arrows come to it from several different places in the scheme. Sometimes evaluation occurs during or just after preliminary scanning. Usually it takes place most vigorously after development/adaptation and before trial (i.e., "Is this idea good enough to warrant a limited pilot run?"). Post-trial evaluation is rationally called for, but may be empirically feeble. Notice that many different questions must be asked regarding the innovation: "Is it any good--will it accomplish the thing we want? Is it feasible? Will parents accept it? Can the teachers do it? How hard is it? Is it going to cost more than it's worth?" And so on. Notice that there are many legitimate questions to be asked, aside from those related to educational impact.

Support for users (item 12) while they're starting out with the innovation, either in the pilot phase or later on, also seems to be an important need.

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[4] Dionne (1965) found that extensive adaptation of the supposedly well-designed PSSC materials occurred when they were adopted in local school systems.

Finally, there is a cluster of processes (items 13-16) that provide for routinization and durable installation of the change. These processes include the actual go/no-go decision to adopt (item 13), informing and training users (items 14 and 15), and regular maintenance (item 16) keeping the innovation free from rust or decay (depending on whether you prefer mechanical or biological analogues).

This last cluster of functions is in some sense least interesting; it involves building in a new part to a system. The middle cluster (8 through 12) is primarily thoughtful hard work. The planning and inventing cluster (1 through 7) is perhaps the most interesting and the most anxiety-provoking (Will it work? We're putting our necks on the line. That sounds crazy.).

This review of innovative processes shows clearly that innovative attitudes are not enough.[5] Structures which permit design, adaptation, evaluation, trial, and routinization of innovations are essential. Without them, innovative motivation simply leads to "dithering," quasi-random perturbations of practice.

## The Management of Educational Improvement

How are all these diverse processes going to be "managed," brought to coherent fruition in any particular school system? There are perhaps three major answers to this question.

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[5] Gross, Giacquinta & Bernstein (1968) showed that a school in which nearly all faculty had strongly favorable attitudes toward individualized instruction nevertheless failed to carry it out, primarily because of lack of supporting structures to support the improvement processes outlined above.

Coordination. Persons like those in this audience are primarily responsible for the steering, development, and flexing of innovative processes. Coordination can be seen as a kind of overlay on Figure 1; each process needs to be linked with other processes, timing needs attention, information needs to flow between different processes, and so on. Note that providing the freedom to innovate independently--"Go ahead and do your thing"--can be seen as a form of coordination.

Structures. A variety of working structures exists--or can be created--to manage innovative processes. The range of these structures is considerably broader than the organizational chart on the wall of the board room. Seven types of structures are described below.

1. Roles. Bundles of expectations labeled "teacher," "student," and "principal" now exist. One is also at liberty to create new roles, such as the "general instructional supervisor" and the "sponsor" used by Dionne (1969). The first served as a general building-level catalyst and change agent. The "sponsor," a sort of "product manager," was responsible for aiding the progress of an innovation through its pilot phase in a school building, in collaboration with another new role, the "demonstration teacher."

2. Meetings. Established groups (boards of education, building faculties, departments, and so on) carry out their work through face-to-face meetings, more or less carefully designed and carried out. Effort put into "meetings improvement" via laboratory human relations training methods ordinarily has rather high payoff; most meetings are so poorly conceived and operated that the only way to go is up.

It is also possible to design ad hoc meetings. An example is the so-called "microcosm meeting," which might consist of the high school principal, six sophomores, four teachers, two parents, and a member of the board of education, spending a weekend together looking at what's wrong with the system as it stands. Though such a structure is not a durable one, I assure you that it can have very profound effects on innovative processes.

3. Groups. Various kinds of durable groups (teams, committees, faculties, councils) exist in school systems; they work not only through face-to-face meetings but via the tasks their members carry out independently. Here too, ad hoc groups can be created. Dionne (1969) set up a type of group for project management of a specific innovation, which included the sponsor (usually a released-time teacher), the general instructional supervisor, the principal, the demonstration teacher, and the K-12 curriculum specialist in the relevant subject matter area. This group essentially steered and managed the processes identified in items 8 through 15 of Figure 1, then dissolved when the innovation was successfully built in to the system.

4. Procedures. These are essentially arrangements of persons, activities, and time, set up to cause work to be accomplished. How are purchase orders routed? Who influences the budget along the way to completion? What sequence is involved when a teacher wants to visit another school system on released time?

Procedures may be devoted wholly to steady-state operation of the system, or they may support system-changing innovations as well (e.g., what is the path of a teacher's innovative idea through the system? Is it routed to the principal, or to an innovation screening group? Explored

with a curriculum council? Checked out with the relevant subject matter supervisor?) See Dionne (1969, Addendum 9) for an interlinked set of procedures for encouraging and supporting innovation in instructional materials.

5. Finances. The management of the budget provides the necessary (though not, as we have seen, the sufficient) conditions for educational improvement. The fraction of money that goes into anything resembling internal research and development is very low in most school systems, usually about 1 or 2 percent. Any increase in this fraction, even though it may not approach the 10-15 percent typical for high-adaptive industrial firms, can have useful effects. For example, a $5,000 investment for off-site planning sessions for a system's administrative council, Board, and interested building faculties, though it may represent only a fraction of 1 percent of the budget, can radically increase energy devoted to goal-setting and diagnosis.

6. Facilities. Buildings, rooms, and equipment are required, in the sense that innovative processes take place in real time and space and can be supported or blocked by the physical surroundings. I need not elaborate on this, except perhaps to say that coffee machines, felt pens, Xerox machines, and conference rooms may be just as important as overhead projectors and room dividers in supporting innovative efforts.

7. Policies. Systems need guidelines underlying all of the educational improvement processes outlined in Figure 1. For example: policies may deal with teacher growth and development (sabbaticals, trips, in-service training); with frequency and explicitness of planning operations; with amounts of energy to be devoted to external scanning vs. internal invention; with salary differentials among various roles (does a building change agent get more money than the building administrator?).

Whether or not a board can in fact separate policy from procedure, as it is in principle supposed to, the presence or absence of clear policy underlying specific educational improvement processes (and structures) is an important leverage point for looking at the innovative efforts of any school system.

So far, I have reviewed two answers to the question of how innovative processes are managed: via coordination, and via structures, either durable or ad hoc in nature. The third is most central to the remainder of this discussion.

Climate. The problem, in effect, may not really be a matter of getting specific teachers or administrators to accept SMSG math, team teaching, IPI, or any one of a hundred specific acronymic inventions. Rather--considering your own school system--wouldn't it be nice if there were a generalized receptivity every time you tried to do something? Or, wouldn't it be delightful if the general attitude in the system was, "Well, why not?" instead of, "Why do you want to do that?" Anything that could be done to induce a general climate of inventiveness, creativity, willingness to take risks, or excitement, would in principle make it a lot easier for a school system to devote more of its energy to rebuilding itself.

The label "climate" has been widely used in the educational literature, and some efforts have been made to measure it (e.g., Halpin and Croft's Organizational Climate Description Questionnaire). However, it remains a rather diffuse, undefined concept, implying some sort of organizational background condition ("temperate," "tropical"), which is more durable than the day-to-day weather ("rain squalls," "sunny"). There is, however, a well defined social-psychological concept which is perfectly usable for our purposes (specifying organizational conditions which would promote innovativeness). I refer to the concept of group norm.

## The Nature of Norms

A caricatured example will illustrate the concept. Suppose an IBM employee comes to work in a striped shirt. Perhaps his colleagues look at him, snicker a little, and say things like "What about the IBM image, Buster?" The next morning our hero returns wearing a drip-dry short-sleeved white shirt, like all of the other men at IBM. Perhaps he gets an acknowledging smile, perhaps he only feels better to know he has done the approved thing. Notice that a number of features in the idea of norm concept are implicit in the example.

First, the example concerns a durable group, existing over a period of time. Second, the group members have some interaction together: they're not just working in separate cubicles, but do interact, work, and talk with each other. Third, there is a specific idea of desirable or undesirable behavior, a "should" or "should not." An IBM man should wear a white shirt--usually drip-dry with short sleeves--and he should not wear flamboyant or unusual types of shirts (such as turtle-necks or dashikis).

Lastly, there is some kind of sanction attached to the norm. That directed at our IBM exemplar is a rather mild negative sanction--a snicker and a satirical remark. Sanctions may also be positive and may reward "should" behavior. We have four components, then: the group, some interaction time, an idea of a "should" or "should not," and some kind of a sanction to back it up, to bring members who deviate back into the fold.

The example I have given is deliberately trivial. But norms can deal with matters of great importance, and carry powerful punishments for non-conformity. At the level of large social systems, we need only ponder the fate of heretics, witches, prophets, and other questioners of the status quo to know that norms can matter a great deal.

It is important to realize that any norm is a solution to some kind of dilemma, a sort of balancing act between a hoped-for goal and some negative outcome which is feared. As an illustration, consider the norm in a school faculty which regulates the amount of communication between teachers about their own teaching practices. As you know, in most school systems, that communication is relatively small. That is, teachers don't really talk at the gut level with other teachers about what they personally are doing in their classrooms. This has been fairly well documented in a number of studies.[6]

What's the dilemma for which this norm is a solution? The teacher wants to communicate with other teachers because he feels isolated, alien, alone, laboring at a tough, frustrating job. He'd like people to talk to, to bind up his wounds. He might even get good ideas from communication with others. Such forces are pressures toward more communication. But there are also many negative forces: "If I really began talking about what I was doing in my classroom, people would ridicule me. they'd think I was stupid. It might get to the principal, and I don't trust him." And so on.

So the final level of authentic communication that the teacher thinks it appropriate to engage in with other teachers really depends on the results of his wishes and drive to communicate versus his fears, the anticipated costs and risks of communicating. This is at the individual level. At the group level, it is as if the members develop, over time, some shared notion of just where the balance should lie--and that is what constitutes a group norm.[7]

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[6] See, for example, Becker (1953), Lortie (1961), and Chesler, Schmuck and Lippitt (1963).

[7] For an interesting discussion of the formation and change of group norms in these terms, see Whitaker & Lieberman (1964).

Notice, by the way, that the level of inter-teacher communication could be changed by trying to reduce the fears, creating more trust between teachers and between teachers and administration. Or it could be done by stressing the advantages of communication. The former (reducing fears and costs) usually works much better; this will be discussed further later on in this paper.

A norm, then,is a solution to a dilemma. For this reason, it is rare for norms to be all-or-nothing in character. Teachers could never spend all of their time communicating with other teachers, and they will never spend zero percent of their time in this manner. They arrive at some kind of normatively regulated equilibrium point in between these theoretical extremes.

In principle, there is no reason to suppose that such an equilibrium could not be changed. This possibility opens the way for many associated changes. If the level of authentic inter-teacher communication seen as "appropriate" in a particular school building could be moved up, some striking things could happen. In such a building, people would feel more supportive and more trustful, care about each other, provide help, try new things, would talk to each other, really--instead of maintaining a pleasant but professionally detached relationship as colleagues. As teachers communicated more to each other about their own teaching inventions, we might expect a general rise in innovativeness.

There are some clear data (Chesler and Barakat, 1967; Manno 1968) to show that increased inter-teacher talk about professional practice is associated with greater innovativeness and with some of the other changes suggested above.

Innovativeness as a norm. Norms regulating how innovative it is appropriate to be are especially interesting. Notice that in the IBM example, the stress is on uniformity--white shirts or else! Everyone must conform, produce the same behavior, or risk being teased, rejected, or ostracized. The employee who conforms feels with it, part of the IBM team, and experiences a sense of some solidarity.

But suppose a norm developed which favored innovation--a "do-your-thing" norm. People would feel encouraged to innovate, would feel they should innovate, create, experiment if they were to be accepted in the group. Notice an important feature of such a norm: people conforming to it are not doing uniform things. If the norm is "do your thing," each group member will, by definition, do a different thing. He is conforming to the norm, but at a higher level. At the first level of behavior, we don't have the dead uniformity of the IBM white shirt.

This idea is attractive, especially if one is concerned with the specter of conformity and sameness. Innovativeness norms, if conceived as meta-norms working at a higher level than other specific-behavior norms, can actually be seen as contributing to diversity, creativity, and anti-uniformity. In this sense, they would be liberating rather than enslaving, would lead toward self-actualization and growth. Such norms are not just theoretically possible, but have been shown to exist. Newcomb, Flacks, & Warwick (1967), for example, studying Bennington College in the early 1960's, found that creativity norms were central in the student culture at Bennington College--so much so, that ordinary, straight, square, conventional college students were treated as deviates. "Do your thing,"

in a productive intellectual way, was a very important norm at Bennington. Could such norms develop in school systems?[8]

It might be useful to examine some empirical data bearing on innovativeness norms. Table 1 shows data collected with the COPED "Do's and Don'ts" instrument (reproduced as Appendix A), which asks the respondent to estimate the percentage of people in his school system who would, in effect, approve or disapprove of certain behaviors (such as "push for new ideas, even if they are vague or unusual"). The respondent then indicates whether he, himself, approves or disapproves of such behavior.

The data are interesting in several respects. First, the items differ somewhat in "difficulty"-- how likely it is that they will be perceived to be endorsed, or actually be endorsed. Someone who expects that "questioning well-established ways of doing things" is appropriate may well boggle when it comes to the crunch of "setting up committees which bypass . . ." etc. Secondly, there seems to be a striking discrepancy for the first two items: though the average person thinks that only a minority endorse the norm (typically 30-40 percent are expected to approve it), when the individual selves' attitudes are summed, the actual figure is much higher--typically 60-90 percent. Respondents see their systems as anti-innovative, but they turn out to be filled with innovative people (each of whom thinks he is in a minority). This feature of social systems has been dubbed "pluralistic ignorance," and I shall return to it later. It looks, by the way, as if the third item dealing with bypassing

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[8] "Do your thing" school buildings, at least, seem viable. I have visited and worked in a few. They are exciting places to be, and have problems of a different sort than most schools. The teacher who just wants to be "ordinary" feels somehow put down, not accepted. Faculty meetings never start on time. It seems more difficult than usual to coordinate the curriculum. The moral, of course, is that any norm has unintended or undesired consquences. (Of course, they can be worked with, softened, altered--in part, by creating new associated norms. This is discussed further below.)

Table 1

ESTIMATED AND ACTUAL PERCENTAGES OF SCHOOL SYSTEM PERSONNEL ENDORSING NORMS: ILLUSTRATIVE DATA

| Norm | | Large urban school system* N=1,100 | Wealthy suburban school system* N=148 | Selected superintendents† N=34 | Conference of Innovative Educators‡ N=300 (approx.) |
|---|---|---|---|---|---|
| "Question well-established ways of doing things." | System estimate (mean) | 35 | 45 | 38 | 45 |
| | Self's attitude (totaled) | 64 | 78 | 89 | 90 |
| "Push for new ideas, even if they are vague or unusual." | System estimate (mean) | 32 | 40 | 31 | 40 |
| | Self's attitude (totaled) | 58 | 64 | 67 | 70 |
| "Set up committees which bypass or cut across usual channels or lines of authority." | System estimate (mean) | 29 | 32 | 27 | 40 |
| | Self's attitude (totaled) | 29 | 35 | 28 | 80 |

* Data from Cooperative Project in Educational Development, 1967.

† Data from participants attending Superintendents' Work Conference, Teachers College, Columbia, Summer 1966.

‡ Participants at the general session of the Conference at which this paper was read filled out the "Do's and Don'ts" instrument (see Appendix A); their responses were roughly assessed by hand-raising later in the session.

usual channels doesn't provoke this sort of misperception--people understand the real attitudes well.

It should be emphasized here for a moment that norms are what people think they are. Your perception that only 20 percent of your school system members would agree that "well-established ways" should be questioned is a real perception (regardless of whether it is "correct" or not), and might well lead you in the direction of innovative strategies such as persuasion, exhortation, bypassing, or manipulation. On the other hand, if you believed (correctly or not) that 70 percent would approve the statement, then innovation would be expected to happen naturally, without pressure from change agents; you could relax and enjoy your innovative environment. In either case, one's belief about social reality has led to a choice of behavior.

Finally, people in our sample attending the Conference of Innovative Educators, as might be expected, personally endorse these norms rather heavily, and see their own school systems as endorsing them at a rate somewhat above that in the other samples shown. They too, however, see themselves as more innovative than their (average) system member.

## Strategies for Norm-Changing

The above discussion of norms has emphasized their importance in regulating matters such as innovativeness in schools,[9] and has discussed their nature in ways that might lead to some ideas on how to change them.

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[9] Norms do not, of course, "regulate" innovativeness in a tight, mechanical sense. Ultimately, any individual's choice to risk-take, to try something new, is a personal choice. Individuals often conceal from themselves the real power of choice they have, by claiming that others are constraining them ("the bureaucracy," "my principal won't let me"). In any system, there is usually a tiny minority of persons whose personal choice-making occurs primarily in response to inner goals, like

Most theoretical discussions of group norms imply that the norm goes on forever--someone deviates, he receives sanctions, and the norm is reinforced and maintained. Yet norms do change over time. How might norms, specifically innovativeness norms, be changed, assuming for the moment that the reader is an administrator or change agent who would prefer that the local norms support innovation more vigorously? Below, nine different strategies are suggested.

Examination of Own Expectations. Most innovative strategies assume an inert mass of teachers who don't want to change. Table 1 shows data that suggest that assumption may be unfounded.

In another study in a suburban school system, we asked teachers, "Have you had an idea within the last six months which would improve education in our system, outside of your own classroom?" Seventy-five percent of the teachers said, "Yes," The next question was, "Did you talk to anybody about your idea?" Half of those with ideas said, "No." Of the half who did talk with someone, 60 percent said the outcome was "Nothing further came of it," 12 percent did not know what had happened, 23 percent said, "There was interest, but nothing further came of it," and about 5 percent said, "Some action was taken on the idea." That 5 percent represents only 2-1/2 percent of the original batch of ideas; there is thus an enormous gap between idea production and implementation.

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Maslow's self-actualizers. But for most people, the norms are important: they serve as a blocking or facilitating feature, and they channel personal choices in certain directions. Over a period of time, too, norms tend to become internalized, part of the person's attitude (and perhaps value) structure. Given the importance of norms for most people, we can see that "liberating" meta-norms like those supporting innovativeness are especially important not only for richness in social systems, but in the persons who inhabit them.

If you as a change agent make the assumption that people do not have innovative ideas, and/or do not want to push them, you will be likely to act in a way that cuts down both on idea production and implementation. If you examine and question this belief (perhaps by collecting data like the above), you will be more likely to encounter higher rates of innovation, if only because you will be inviting people to report their existing ideas, rather than assuming they do not exist. Has this changed the norm? Possibly; your behavior as a focal person, a "norm-sender" (as a high-status person is sometimes labelled) is different. Group members will infer that changes have occurred. Norms are what people think they are.

New Behavior From Status Persons. This point is worth emphasizing. Belief changes on the part of change agents or administrators will not cause normative change unless they are accompanied by new, visible administrative behavior. A quotation from Hainer et al. (1967) is apposite here.

> The common metaphor of "climate" also introduces difficulties in understanding the problem, as we have come to view it: somehow the rainmaker is protected from getting wet. Somehow the person who sets out to create a climate is seeing himself as secure while manipulating others to confront the anxious, uncertain and often unrewarding task of trying to make something out of nothing--to invent. (p. 212)

> When one uses "stimulating creativity" as a common metaphor, one seems to suggest that there are those who stimulate and those who are stimulated. The phrase suggests that the stimulator knows a valid procedure for manipulating somebody else's creative drive and is somehow freed himself from facing the challenge to confront the unknown and work toward something new when he doesn't have a prayer about what it is going to be. We feel that if a man is going to ask someone else to confront the uncertainty of true research and invention, he had better be prepared to do so himself--in the area where the problems have reality for him. (p. 211)

In effect, then, normative movement toward innovativeness is very unlikely unless high-status persons act more innovatively themselves--take risks, make personal choices to change. If they do so, they appear to set new norms. For example, consider the interesting career of Thomas P. F. Hoving, who revolutionized the New York City Parks Department (e.g., solving the problem of crime in Central Park not by police power, but by bringing thousands of New Yorkers to the Park to ride bicycles, fly kites, and sit in sidewalk cafes). Hoving has now taken his charismatic style to the staid Metropolitan Museum; its staidness is dropping radically. For another example, see Carlson (1961); his research showed that superintendents hired from outside their systems were substantially more innovative than insiders; they were presumably less bound by the going norms, and with the implied license to innovate which a board often gives an outsider, could feel free to deviate, and build new norms.

Risk Reduction. A third strategy involves reducing the fears and risks associated with change. It was suggested earlier that emphasizing the rewards and positive goals involved in change does not work very well. As Lewin pointed out (1958), adding "driving" forces to an equilibrium simply adds tension to the system. People feel exhorted, may feel guilty, or may use up energy in resisting, counter-pushing. If, on the other hand, the risks or costs ("restraining forces") are explored and reduced, the existing motivation to innovate will take hold, and the system will change with less tension. Maier (1952) has developed a procedure to aid this process, called the"risk technique." A group considering a specific change discusses all the risks or problems that might arise if the new solution were put into effect; these are posted on a chalkboard or newsprint. The risks are evaluated, and ways are invented to reduce them. This procedure seems to make change very much easier; often simply talking about (rather than denying) fears and risks helps to reduce them, while providing support.

Analysis of Goal-Blocking Features of Norms. A fourth strategy involves examining the ways in which existing norms prevent people's achieving what they want (i.e., the costs of the present normative equilibrium), and making these visible. Consider the example used earlier of norms regulating teacher interaction.

Most teachers don't talk with each other very much, yet many have a real hunger for communication. They wish that people would be real with them; they wish the principal would tell them the truth about what he really feels. They wish they knew what other teachers really think about their own work. Thus, the norm is blocking movement toward important goals. Acknowledging this state of affairs, making it publicly visible, is likely to shift the norm (especially if risks can be reduced).

Notice, by the way, that norms which are blocking attractive, interesting, or useful behavior do tend, over the years, to drift. For example, bathing suits met a certain norm of modesty in 1900, but the norm's existence blocked the fact that people wanted to display, and to see more of, the human body. So the norm has drifted--bathing suits have gotten smaller and smaller. A series of incremental deviations was tolerated, one by one, basically because people wanted things which the norm was blocking.

Perhaps we should call this the Bikini Theory of Normative Change. The important point is to note the dissatisfactions that a supposedly widely-endorsed norm carries with it. In the case of the anti-innovativeness norms in school systems, the costs include boredom, dullness, stereotypy, lack of adventure, low self-esteem. If you will excuse the expression, Innovation Can Be Fun.

Reduction of Pluralistic Ignorance. We saw earlier that private attitudes about such matters as "Should you push for new ideas, even though they are vague or unusual?" often lean in a more radical direction

than the norm, as people see it. Everyone else is anti-innovative but me, thinks everyone.

Under such circumstances, the collection and feedback of data like those in Table 1 can have very useful effects. If everyone in a building faculty, for example, sees and discusses data showing that innovative attitudes are, in fact, widespread, then the norm is very likely to shift. Group members may also begin exploring associated questions: If we are all so innovative privately, why do we see others as not endorsing innovation? Is it because we want to erect barriers against change? Is it that we favor innovation privately, but never act innovatively publicly--so others think we are conservatives?[10]

Data feedback and discussion (see McElvaney & Miles, in press) does seem to have strong norm-changing effects. Once people have established clearer communication with each other: (a) the norm is correctly perceived as being closer to, and is thus supported by, privately-held attitudes; (b) the old, "incorrectly" perceived norm loses its force (i.e., deviations from it are no longer punished).

Rewards for Deviation. Status leaders in schools are in a good position to reverse the usual sanctions--to supply rewards rather than punishments for deviation. In schools with anti-innovative norms, the changeful teacher inhibits or hides his efforts. Note, for example, the degree to which Kohl's work, described in 36 Children (1967) was accomplished only by dint of concealment and avoidance of wave-making. I suspect that if the considerable rewards which have come to Kohl (fame, freedom to innovate, money) since he left the New York City schools had been available

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[10] Biddle et al. (1966) found that durable misperceptions of this sort were fairly frequent among teachers, parents, administrators, and students. Their report explores reasons for this, including the restricted communication between these roles.

to him in the New York schools, those schools would now be somewhat different in character.

From a change-agent's point of view, the main issue is perhaps not just that a Kohl who tries to be more innovative receives some personal benefit, but that the reward system is altered to support new norms. Can any teacher who requests released time to try an innovation receive it? Does the faculty newsletter include descriptions of pilot projects? Do demonstration teachers get a salary increment? Once again we see the importance of structural supports for change, as with the Gross et al. study.

Cosmopolitanization. One of the clearest findings in the sociological literature on innovation (see Rogers, 1962) is that the "cosmopolitan" (i.e., the person whose experience and allegiance has been to a series of social systems) is more likely to innovate than the "local," who has a provincial, norm-bound perspective. This seems true both because the cosmopolitan has encountered a wider range of norms and activities, so has a bigger stock of possibilities, and because multi-norm experience tends to give perspective, to rob any particular set of norms of their exclusive, "self-evident" status.

School staffs can be cosmopolitanized in two ways: by exporting locals with a promise to return (trips, sabbaticals); and by importing ready-made cosmopolitans (outsiders, as in Carlson's 1961 study). Would such procedures create people more committed to specific new ideas (probably yes), and to innovativeness in general? Perhaps. If they had visited both traditional and high-innovative systems, immersed themselves in the local norms, and found life in the latter type of setting intrinsically more satisfying, yes. We have to remember that some people (fewer than ordinarily supposed) are "emotional conservatives."

Reduction of Group Salience. Making school staffs more cosmopolitan tends to reduce the salience or "clout" of the local group for the "liberated" member. The group is less important to him, and its sanctions less feared or wished.

The easiest way to do this is usually to decrease interaction with group members (close the office door, skip the coffee break, leave town). Certain strategies involving the creation of a new innovative subsystem (the experimental project, the special school, the teaching team) not only reduce the salience of the (anti-innovative) group, but radically increase interaction with a new (innovative) group, giving its norms and sanctions more potency.

Building Supporting Norms. The final strategy for changing norms about innovativeness acknowledges the fact that man is not only a multi-group but a multi-norm creature. For example, it is rather difficult to take the risks of innovation unless you feel that the climate is also relatively open (that you and others can be honest about your successes and failures), relatively trusting (that you will not be hurt by others, nor hurt them), and relatively collaborative (that you are willing to work on problems without dominating others or pulling rank).[11] Richard Foster's comments earlier in this conference on the "high-trust" model he developed in the innovative Monte Vista High School (e.g., students are free to sit in on and take part in faculty meetings) are an illustrative example.

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[11] Hilfiker (1969) found in a study of eight school systems that there was a strong correlation (r=.79) between innovativeness and the existence of norms encouraging openness and trust. (Interestingly, norms specifically encouraging innovativeness did not themselves correlate with innovation.)

A strategy for building such supporting norms that enjoys increasing use in schools is sensitivity training or T-group training, used with intact groups, such as building faculties, boards of education, or administrative councils. Intensive group experience of this sort has been used for individual change (more insight, more awareness, and so forth) for many years. It has now become apparent that such training is an even more powerful tool for changing norms of groups.

One important reason for the success of such methods is that they rely rather heavily on what have been called self-analytic processes. Any topic--the principal's leadership style, conflicts between departments, the meaning of some previously hushed-up incident, one's own feelings of isolation from other teachers--is legitimate for discussion. Thus norms, too, can become a central discussion topic, can be questioned, explored, and (tacitly or explicitly) revised. The self-analytic attitude tends to "soften" norms, make them more plastic, questionable, less self-evident, open to change. In addition, educational groups who have become more open, trusting, and collaborative with each other seem to be in an excellent position to make the necessary <u>structural</u> decisions required for the support of innovative enterprises. That is, such training is not only a matter of creating "better communication," but of actual problem-solving and decision-making.

An interesting study by Schmuck (1969) compared three in-service treatments for teachers: (1) classroom diagnosis plus consultation with individual teachers; (2) these plus T-group training for individuals; and (3) an organizational development laboratory for an entire faculty. The diagnosis and consulting changed verbalizations but not classroom behavior. The addition of T-group training changed both. The most interesting finding was that the organizational training (which had teachers, principal, secretary, head cook, and custodian working together to identify building problems and decide on solutions to them) appeared to increase classroom

innovation rates, although no specific effort had been made in the training to do this. Increased trust, communication, and active problem-solving among the adults appeared to have released a good deal of innovative energy, though no one had explicitly helped the teachers, or even urged them, to teach in different ways. Many of the teaching innovations noted were adaptations of the organizational training exercises the teachers had themselves experienced, so that, in some respects, the "medium was the message."

## Concluding Comment

This list of strategies for altering the "meta-norm" which regulates innovativeness in school systems is certainly not an exhaustive one. Which of them a particular change agent chooses to employ, and how seriously, depends ultimately on how much more innovative (and how open, trustful, and collaborative) he dares and hopes to be. The fundamental message of this paper, however, is that norma (the working culture of a social system) are changeable, not immutable properties--and that practical, workable technologies for changing norms are available.

We are currently experiencing strong pressures for change in most of the institutions of our society, educational institutions not excepted. Student and community protest, widespread in colleges and universities, is working its way rapidly into high schools (and even elementary schools). It is clear that demands for collaboration in restructuring our educational organizations are not, by and large, ill-considered or wrong-headed: they come from the brightest, most able, most humanitarian of our students and teachers (Flacks, 1967). I suggest that whether any particular educational system--school, school system, or college--responds to pressures for change

with polarization and conflict escalation, or with adaptive problem-solving, is at bottom a matter of the existing norms. The strategies I have suggested in this paper may turn out to be among the most crucial tools for organizational renewal in the years just ahead.[12]

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[12] Some preliminary evidence on this is being collected by Mark Chesler of the Center for Utilization of Scientific Knowledge at the University of Michigan, who is using these methods with a dozen school systems faced with severe conflict. It also seems likely that the relative success in restructuring student participation at the University of New Hampshire during the current academic year was in large part due to the presence of faculty "change agents" with wide experience in sensitivity training and organizational development methods.

Appendix A

## DO'S AND DON'TS*

In any school system, there are informal "do's and don'ts." They are rarely written down anywhere, but they serve as a kind of code, making it clear what people in the system should and should not do, if they are to be accepted by others.

Below, there is a list of specific things that a person--an administrator, a teacher, a staff member--might do or say. For each item, we would like your estimate of how many people in this system would feel that you SHOULD do it, and how many people would feel that you SHOULD NOT do it, in terms of percentages. There will always be some people who would have no feeling one way or the other.

For example:

| | Percentage who would feel that you SHOULD | | Percentage who would feel that you SHOULD NOT | | Others (percentage who have no feeling one way or the other) | |
|---|---|---|---|---|---|---|
| X. Follow administrative directives. | 70 | + | 10 | + | 20 | = 100% |
| Y. Complain when things are not going right. | 40 | + | 30 | + | 30 | = 100% |
| Z. Spread rumors. | 0 | + | 90 | + | 10 | = 100% |

Example X would show that you believed most people--70%--would feel that one SHOULD follow administrative directives. Only 10% would feel that you SHOULD NOT follow administrative directives necessarily. But there are also 20% of people who have no feelings about it one way or another.

Example Y shows a different picture. It would show that you thought 40% of people in this system would feel that you SHOULD complain if things are not going right. On the other hand, you estimate that 30% would feel you SHOULD NOT complain. An there are quite a few people (30%) that you guess have no particular feeling about it one way or the other.

In example Z, it's clear that you think no one would feel that spreading rumors is a good idea, and that 90% would feel that one SHOULD NOT do it. Even here, of course, you estimate that there are a few people--10%--who don't have a clear feeling about it one way or the other.

Your answer to each item will naturally be different. Just remember that your three figures for each item should add up to 100%. Remember: we are not concerned with what you personally think you whould do, but with your estimate of what others would feel one should (or should not) do under most circumstances. We are asking you to be a kind of a detached observer of the do's and don'ts in your school system.

Now please turn to the next page and give your estimates of how other people in this sytem feel about "should's" and "should not's" Do not worry about being too precise. Your first intuitive guess is usually best.

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| REMEMBER: Do not focus on what you personally think you should do. Rather, give your estimate of what OTHERS in your system would feel. | Percentage who would feel that you SHOULD | | Percentage who would feel that you SHOULD NOT | | Others (Percentage who have no feeling one way or the other) | |
|---|---|---|---|---|---|---|
| 2. Tell colleagues what you really think of their work. | _____ | + | _____ | + | _____ | = 100% |
| 7. Question well-established ways of doing things. | _____ | + | _____ | + | _____ | = 100% |
| 10. Disagree with your superior if you happen to know more about the issue than he does. | _____ | + | _____ | + | _____ | = 100% |
| 12. Push for new ideas, even if they are vague or unusual. | _____ | + | _____ | + | _____ | = 100% |
| 13. Ask others to tell you what they really think of your work. | _____ | + | _____ | + | _____ | = 100% |
| 19. Try out new ways of doing things, even if it's uncertain how they will work out. | _____ | + | _____ | + | _____ | = 100% |
| 22. Set up committees which bypass or cut across usual channels or lines of authority. | _____ | + | _____ | + | _____ | = 100% |
| 24. Be skeptical about accepting unusual or "way out" ideas. | _____ | + | _____ | + | _____ | = 100% |
| 26. Stick with familiar ways of doing things in one's work. | _____ | + | _____ | + | _____ | = 100% |
| 27. Trust others to be helpful when you admit you have problems. | _____ | + | _____ | + | _____ | = 100% |

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So far, you have been trying to estimate how others in this system would feel. Of course, your own personal attitudes may differ from, or be the same as, what you guess others' to be. We are very much interested in assessing what your own attitudes on these items are.

Please think about how you, yourself, feel about each of the items you have just answered. Naturally, your feeling will depend on the particular circumstances involved. But try to consider how you typically feel in most situations.

To indicate your answer, place a check (✓) in the column which shows what your own attitude is, for each item. Think only about your own, personal feelings, and put a check under **SHOULD**, SHOULD NOT, or "no feeling" for item 2, item 7, and so on until you have checked all items.

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